



## Home Elevation in Ohio

### Full Mitigation Best Practice Story

#### *Muskingum County, Ohio*

**Muskingum County, OH** - Once was more than enough for the McDonoughs.

Jim and Carol McDonough bought a summer/weekend, getaway modular home about 100 feet from the

Muskingum River in Blue Rock, Ohio because of its sweeping river view and it seemed to sit above most of the river flooding that occurs in this area, Ms. McDonough said.

"The structure is a 26 by 50 foot, wood frame house", James McDonough said. It's about 10 years old.

"Then came the January 2005 flooding, the highest in 50 years according to the locals" said Ms. McDonough. The McDonoughs ended up with four inches of water on their first floor.

"We had to tear out our carpet and insulation. It was a mess", said Jim McDonough. "I estimate we had about \$5,000 in damage. In addition to the monetary cost, there also was the loss of use and time spent cleaning up."

They decided they did not want to go through that again. "We chose to elevate", Ms. McDonough said. "Since this was the highest water in 50 years, and we had four inches on our first floor, we decided to go up 28 inches higher than the four courses of concrete blocks."

James McDonough also went on to the Internet and visited the Ohio Department of Natural Resources. "I found they had the base flood elevation for this area on their site. It is 25 feet. I elevated so I would be a couple of feet above that" McDonough said. The base flood elevation determines the extent a 100-year flood (a flood that has a one percent chance of occurring in a given year) will rise to in a given area.

Contractors were hired to lift the home by installing piers four concrete courses high under the home and then set the home back on the piers.

"I was fortunate with my contractor" McDonough said. "He had done other work for me. When I broached the elevation project to him, he said he could do it." The McDonoughs are well satisfied with the finished project.

The McDonoughs think the elevation will prove a good investment. "It cost us \$8,000 for the elevation work" McDonough said. But when the Muskingum River rises again, as it does every year says Carol McDonough, "those 32 added inches should keep us high and dry."

Based on their costs and losses from this event, they believe the work will pay for itself if water from the next two floods like the January 2005 flood does not reach the structure's first floor.

This is what is known as mitigation; taking steps now to reduce the chances of sustaining future disaster damages.

"We commend the McDonoughs for elevating their structure. They took responsibility for themselves and used their own resources to protect themselves from future flooding" said Acting Regional Director Janet M. Odeschoo for FEMA Region V.

The State of Ohio Emergency Management Agency (Ohio EMA) administers the hazard mitigation program.

Ohio EMA Executive Director Nancy Dragani said all too often folks in harm's way wait for the government to solve their problems, but many times the solution is in their own hands. "The McDonoughs are a tremendous role model for what can be done with a little money and lots of gumption and will."



#### Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region V**

State: **Ohio**

County: **Muskingum County**

#### Key Activity/Project Information

Sector: **Private**

Hazard Type: **Flooding**

Activity/Project Type: **Elevation, Structural**

Structure Type: **Wood Frame**

Activity/Project Start Date: **02/2005**

Activity/Project End Date: **03/2005**

Funding Source: **Homeowner**

#### Activity/Project Economic Analysis

Cost: **\$8,000.00 (Actual)**

#### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Yes**

Federal Disaster #: **1580 , 02/15/2005**

Value Tested By Disaster? **No**

Repetitive Loss Property? **Yes**

#### Reference URLs

Reference URL 1: **<http://www.floodsmart.gov>**

Reference URL 2: **[http://www.ema.ohio.gov/nat\\_haz\\_mit\\_plan.htm](http://www.ema.ohio.gov/nat_haz_mit_plan.htm)**

## Main Points

- Worst flooding in 50 years caused \$5,000 of damage to first floor of the home.
- Utilized the Ohio Department of Natural Resources web site to determine the base flood elevation for their property.
- Homeowners elevated home 32 inches above the floodplain.
- Elevation expected to pay off after two future floods.



The McDonough's elevated their home 28 inches



McDonough's home along the Muskingum River